

## FORMING A POROUS DIELECTRIC LAYER

### Abstract of the Disclosure

A dielectric layer is made porous by treating the dielectric material after metal interconnects are formed in  
5 or through that layer. The porosity lowers the dielectric constant of the dielectric material. The dielectric material may be subjected to an electron beam or a sonication bath to create the pores. The structure has smooth sidewalls for metal interconnects extending through  
10 the dielectric layer.